Claim Amendments

1-28 (canceled)

29 (previously presented): A method for the detection of an analyte in a sample, the method comprising the steps of

a) contacting the sample with a device comprising a substrate having through-going channels, the channels opening out on a surface for sample application, the channels in at least one area of the surface for sample application being provided with a binding substance capable of binding to an analyte, wherein the binding substance is within the through-going channels in the substrate;

b) passing the sample back and forth through the membrane; and

c) detecting whether binding has occurred between the binding substance and the analyte.

30 (previously presented): The method of claim 29, wherein the analyte comprises a nucleic acid, an antibody, an antigen, a receptor, a hapten or a ligand for a receptor.

31 (previously presented): The method of claim 30, wherein the analyte is derivable from a human immunodeficiency virus.

32 (previously presented): The method of claim 29, wherein, after step b) but before step c), the sample is again passed back and forth through the membrane in a manner sufficient to allow binding to take place between the binding substance and the analyte to be detected.

33 (previously presented): The method of claim 29, wherein the substrate is an electrochemically manufactured metal oxide membrane and the binding substance is covalently bound to the substrate.

34 (previously presented): The method of claim 33, wherein the metal oxide membrane is comprised of aluminum oxide.

35 (previously presented): The method of claim 29, wherein the substrate is an electrochemically manufactured metal oxide membrane and the binding substance is not covalently bound to the substrate.

36. (previously presented): The method of claim 35, wherein the metal oxide membrane is comprised of aluminum oxide.

37 (previously presented): The method of claim 29, wherein the binding substance is synthesized in situ.

38 (previously presented): The method of claim 37, wherein a compound for synthesizing the binding substance is applied to a particular area using ink-jet technology.

39 (previously presented): The method of claim 38, wherein the compound is applied using electrostatic attraction.

40 (previously presented): The method of claim 29, wherein the binding substance is applied to a particular area using ink-jet technology.

41 (previously presented): The method of claim 40, wherein the binding substance is applied using electrostatic attraction.

42 (currently amended): The method of claim 29, further comprising using the results of step [[d)]]c) to determine sequence information of ~~the~~a nucleic acid.

43 (previously presented): The method of claim 29, wherein the binding substance is an oligonucleotide.

44 (previously presented): The method of claim 29, wherein the binding substance is a sequence of amino acids.

45 (previously presented): The method of claim 29, wherein the binding substance is an antibody.

46 (previously presented): The method of claim 29, wherein the binding substance is an antigen.

47 (previously presented): The method of claim 29, wherein the binding substance is a receptor or a ligand for a receptor.

48 (previously presented): The method of claim 29, wherein the binding substance is a hapten.